

PATENT CLAIMS

1. A securing device for securing a turbocharger comprising a turbocharger casing to a base, having a first and a second foot which can be fixed in the base, it being possible for the two feet to be connected to the turbocharger casing at an axial distance from one another, and the second foot (32) comprising a casing connection region (34), which can be connected to the turbocharger casing (14) and is designed in the form of at least a partial circle arc, a base connection region (36), which is at an axial distance from the casing connection region (34) and can be connected to the base (28), and an axial strut arrangement (38), which connects the two connection regions (34, 36) to one another and includes an angle α in the range from 0° to 60° with the base (28), characterized in that the casing connection region (34) comprises a stop (42) which is in the form of a circle arc and can be connected in a positively locking manner in the axial direction to the turbocharger casing (14).

2. The securing device as claimed in claim 1, characterized in that the casing connection region (34) describes a partial circle arc of at least 90° , preferably of $180^\circ \pm 30^\circ$, and in that the base connection region (36) is arranged in particular on the opposite side of the casing connection region (34) from the first foot (30).

3. The securing device as claimed in claim 1 or 2, characterized in that the turbocharger casing (14) has a connecting flange (40), the external radius of which corresponds to the radius of the partial circle or circle arc of the casing connection region (34), so that the connecting flange (40) and the casing connection region (34) engage in one another in a positively locking manner, and in that the casing

connection region (34) and the turbocharger casing (14) are fixed with respect to one another by means of fixing elements (46) which are distributed uniformly over the partial circle arc or circle arc.

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4. The securing device as claimed in one of claims 1 to 3, characterized in that the second foot (32) has side strut arrangements (39), which engage on the circle-arc-shaped casing connection region (34) on both
10 sides of the longitudinal axis (10) of the turbocharger (12) and extend as far as the base (28), forming a support.

5. The securing device as claimed in claim 4, characterized in that the side strut arrangements (39)
15 connect the casing connection region (34) to the base connection region (36) and are preferably of plate-like design.

6. The securing device as claimed in claim 4 or 5, characterized in that the axial strut arrangement (38) is designed in such a way that it is in each case laterally connected to the respective side strut
20 arrangement (39) over its entire axial length.

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7. The securing device as claimed in one of the preceding claims, characterized in that the axial strut arrangement (38) is designed in the form of a shell-like strut plate, the cross section of which in the casing connection region (34) reproduces the partial
30 circle arc or circle arc of the casing connection region (34), and its cross section in the region of the base connection region (36) preferably describes approximately a straight line.

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8. The securing device as claimed in one of the preceding claims, characterized in that the second foot (32) is connected to the base (28) with the aid of

securing means (48) in such a manner that the second foot (32) can be displaced with respect to the base (28) at least axially in the region of a defined path.

5 9. The securing device as claimed in claim 8, characterized in that the base connection region (36) has receiving openings (50) for the receiving, with play, of a securing means (48), the securing means (48) comprising a securing element (52) which can be fixed
10 in the base (28) and a sliding shoe (54) which surrounds the securing element (52).

10. The securing device as claimed in one of the preceding claims, characterized in that the
15 turbocharger casing (14), along its longitudinal axis (10), comprises a compressor casing (16) and a turbine casing (20) with a gas inlet casing (22) and a gas outlet casing (24), and to secure the turbocharger (12) the second foot (32) is arranged at a distance from the
20 first foot, in the direction of the gas inlet casing (24), and in particular is connected to the gas outlet casing (22) on the turbine side.

11. The securing device as claimed in claim 10,
25 characterized in that the first foot (30) is connected to the gas outlet casing (22) on the compressor side.

12. The securing device as claimed in claim 11, characterized in that the first foot (30) has a
30 connecting element (56) which is connected to the gas outlet casing (22) and axially fixes the gas outlet casing (22), the connecting element (56) being connected on the compressor side preferably to a receiving saddle (68), on which a compressor side of
35 the gas outlet casing (22) is supported in a sliding manner.

13. The securing device as claimed in claim 10,

characterized in that the first foot (30) is designed as a bearing foot (78) which is connected to a bearing casing (18) arranged between the turbine casing (20) and the compressor casing (16).